



DWR WAREHOUSE

97 JUL 28 PM 2:30

F1-158

July 28, 1997

Kate Hansel  
CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

SUBJECT: CALFED Bay-Delta Program Proposals for Ecosystem Restoration Projects and Programs from the Sonoma County Water Agency in Response to the 1997 Category III Request for Proposals (RFP)

Dear Ms. Hansel:

Enclosed please find ten (10) copies of each of the following five (5) CALFED Bay Delta Program Proposals submitted to you, as required, by 4:00 p.m., on July 28, 1997, by the Sonoma County Water Agency:

1. Napa-Sonoma Marsh Wildlife Area Wetland Restoration
2. City of Petaluma Treatment Plant Upgrade
3. Sonoma Valley County Sanitation District Treatment Plant Upgrade
4. Reclaimed Water Pipeline Connecting City of Petaluma and City of Santa Rosa Subregional Treatment Plants
5. San Antonio Creek Watershed Restoration Feasibility Study

Each of these projects meets the eligibility criteria as presented in the RFP. Please direct all questions and correspondence regarding these grant requests to Carolyn Barbulesco on my staff. She can be reached at (707)521-1807.

We look forward to your prompt review and favorable response to these proposed projects, which are located within the identified geographic priority area of the North San Francisco Bay. Thank you.

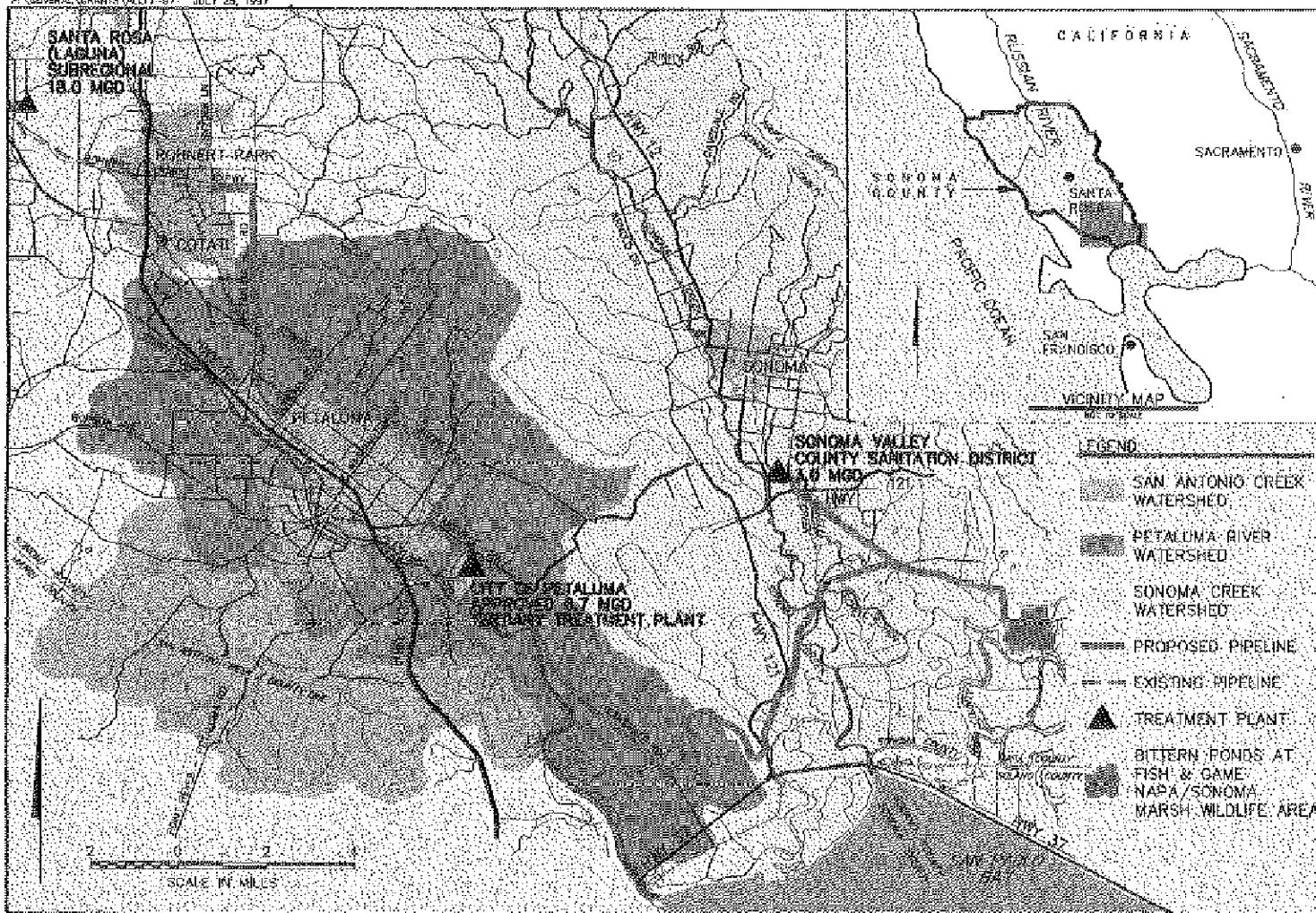
Sincerely,

A handwritten signature in dark ink, appearing to read "Randy D. Poole".

Randy D. Poole  
General Manager/Chief Engineer  
Sonoma County Water Agency

cc: Carolyn Barbulesco

SONOMA COUNTY WATER AGENCY JULY 25, 1997



**SONOMA COUNTY WATER AGENCY**  
2150 West College Avenue  
Santa Rosa, CA 95401

**PROPOSED WETLANDS RESTORATION AND  
RECYCLED WATER PROJECTS  
IN NEED OF FUNDING**

1-003634

1-003634

LYNN WOOLSEY  
8TH DISTRICT, CALIFORNIA

COMMITTEES:  
BUDGET  
ECONOMIC AND EDUCATIONAL  
OPPORTUNITIES

WASHINGTON OFFICE  
439 CANNON BUILDING  
WASHINGTON, DC 20515-0506  
TELEPHONE: (202) 225-5181

155 (58)

Congress of the United States  
House of Representatives  
Washington, DC 20515-0506

DISTRICT OFFICE:  
1101 COLLEGE AVE., SUITE 200  
SANTA ROSA, CA 95404  
TELEPHONE: (707) 542-7182  
FROM PETALUMA CALL:  
(707) 795-1482  
NORTHGATE BUILDING  
1050 NORTHGATE DRIVE, SUITE 140  
SAN RAFAEL, CA 94903  
TELEPHONE: (415) 507-0654  
INTERNET ADDRESS:  
woolsey@hr.house.gov

July 28, 1997

Ms. Kate Hansel  
CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

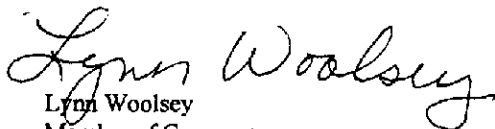
Dear Ms. Hansel:

I am writing to express my support for the Sonoma County Water Agency's (SCWA) application for funding from the CALFED Bay-Delta Program.

As I understand, funding from CALFED would allow SCWA to establish a tertiary-treatment wastewater plant and upgrade an existing waste-water treatment plant to meet tertiary-treatment standards. This would allow for an expansion of the use of recycled water by constructing pipelines to connect treatment centers and watershed areas, thereby reducing the amount of recycled water discharged to the Petaluma River, the Russian River and San Pablo Bay. In addition, SCWA would undertake restoration of the California Department of Fish and Game Napa-Sonoma Marsh Wildlife Area to making formerly bittern ponds suitable for wildlife.

The projects proposed by SCWA would address the important issues of ecosystem health, system integrity, water use efficiency and water quality. Thank you for your careful consideration of SCWA's application for funding.

Sincerely,

  
Lynn Woolsey  
Member of Congress

LW:tf

## United States Senate

HART SENATE OFFICE BUILDING  
SUITE 112  
WASHINGTON, DC 20510-0505  
(202) 224-3553  
senator@boxer.senate.gov  
http://www.senate.gov/~boxer

July 25, 1997

Kate Hansel  
CALFED Bay-Delta Program  
1416 9th Street, #1155  
Sacramento, CA 95814

Dear Ms. Hansel:

I am writing in support of the Sonoma County Water Agency's application for CALFED Bay-Delta funding.

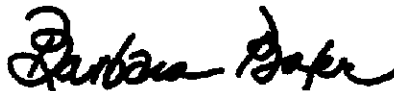
I understand that the five proposed projects would create significant environmental benefits while improving the quality of life for Sonoma County residents.

These important restoration efforts are designed to provide critical improvements to water quality, protect and restore the ecosystem by helping sustain diverse and valuable plant and animal species, and facilitate wetlands restoration. More specifically, the Sonoma County Water Agency plans to upgrade wastewater treatment centers to meet tertiary-treatment levels, reduce discharges of treated wastewater to San Pablo Bay, provide recycled water to local agriculture, supply an alternative to freshwater use for wetland restoration, and off-set freshwater diversions in the San Antonio Creek Watershed.

CALFED funding is important to the advancement of these worthy projects. I urge you to give Sonoma County Water Agency's application your most serious consideration. If you have any questions, please contact Gia Daniller in my San Francisco office at 415-403-0113.

Thank you for your attention to this matter.

Sincerely,



Barbara Boxer  
United States Senator

BB/gd/jls

1700 MONTGOMERY STREET  
SUITE 240  
SAN FRANCISCO, CA 94111  
(415) 403-0100

2250 EAST IMPERIAL HIGHWAY  
SUITE 845  
EL SEGUNDO, CA 90245  
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650 CAPITOL MALL  
SUITE 6544  
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2300 TULARE STREET  
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526 B STREET  
SUITE 990  
SAN DIEGO, CA 92101  
(619) 239-3884

210 NORTH E STREET  
SUITE 210  
SAN BERNARDINO, CA 92401  
(908) 886-8525

PRINTED ON RECYCLED PAPER

# SONOMA VALLEY COUNTY SANITATION DISTRICT TREATMENT PLANT UPGRADE

## SUBMITTED BY

SONOMA COUNTY WATER AGENCY  
2150 W. STATE COLLEGE AVENUE  
SONOMA, CA 94965  
PHONE: (707) 526-1520

TAX ID # 94-6011

## TECHNICAL CONTACT

Michael Thompson  
Phone: (707) 526-1520  
FAX: (707) 526-1520

## FINANCIAL CONTACT

Cheryl Yonson  
Phone: (707) 526-1866  
FAX: (707) 526-6123

JULY 23, 1997

## **EXECUTIVE SUMMARY**

### **SONOMA VALLEY COUNTY SANITATION DISTRICT TREATMENT PLANT UPGRADE**

The Sonoma Valley County Sanitation District (CSD) is located in southern Sonoma County in the center of the Sonoma Creek watershed. The Sonoma Creek watershed covers an area of approximately 170 square miles. Sonoma Creek flows in a southerly direction through the Sonoma Valley into central San Pablo Bay. Sonoma Creek has many small tributaries, most of which still support small anadromous fisheries. The lower portion of the creek is joined by a number of tidal sloughs and bordered by tidal marsh. The Sonoma Valley CSD treatment plant discharges into Schell Slough.

Currently, the Sonoma Valley CSD discharges approximately 1.8 billion gallons of secondary-treated water into Schell Slough and the San Pablo Bay/North Bay Marshes complex between November 1 and April 30 of each year. The Sonoma County Water Agency (SCWA) is requesting CALFED funds for upgrading the Sonoma Valley CSD treatment plant from secondary to tertiary treatment. By implementing this upgrade, water quality in these areas would improve because the tertiary water would be of much higher quality than the water currently discharged by the treatment plant. The San Pablo Bay/North Bay Marshes complex provides habitat for all the fisheries on the Priority Species list including chinook salmon, delta smelt, splittail, steelhead trout, green sturgeon, and striped bass, and also for hundreds of thousands of migratory waterfowl, shorebirds, and wading birds. In addition, because there are fewer restrictions on the reuse of tertiary-treated reclaimed water, a greater demand for this water is anticipated. Increased reuse demand would reduce the amount of reclaimed water discharged to surface waters.

The Sonoma Valley CSD requires significant expenditures for (1) replacement of undersized and deteriorated pipelines in the collection system, (2) replacement of worn out or obsolete equipment at the treatment plant, (3) expansion of the treatment plant to reliably accommodate current and projected inflows, and (4) expansion of the reclamation system. It is very unlikely that the annual sewer charge rates could be increased to the levels necessary to fund programs to address all of these issues.

The Sonoma County Water Agency (SCWA) has also proposed connecting the Sonoma Valley CSD's and Petaluma's wastewater treatment plants to provide reclaimed water to the former bittern ponds in the California Department of Fish and Game (CDFG) Napa-Sonoma Marsh Wildlife Area for wetland restoration. These ponds contain large amounts of extremely concentrated seawater constituents that must be diluted to make the ponds suitable for wildlife. Currently, this proposal would use secondary-treated reclaimed water produced by these treatment plants for dilution of bittern pond water. The benefits and viability of the proposed intertie would increase significantly if the reclaimed water discharged to these ponds met tertiary-treatment standards.

## **PROJECT DESCRIPTION**

### **A. Project Description and Approach**

The Sonoma Valley CSD is located in the Sonoma Creek watershed (Figure 1) and provides sewer service to a population of approximately 34,000 people in the Sonoma Valley and the City of Sonoma (Figure 2). The Sonoma Valley CSD treatment plant is designed and permitted to treat 3 mgd of wastewater to meet secondary standards. Between November 1 and April 30, 1.8 billion gallons of secondary treated water from this treatment plant are discharged to Schell Slough, which is a tributary to San Pablo Bay. During the remainder of the year, the treated water is stored and a small portion of it is used for irrigation on agricultural lands in the southern Sonoma Valley.

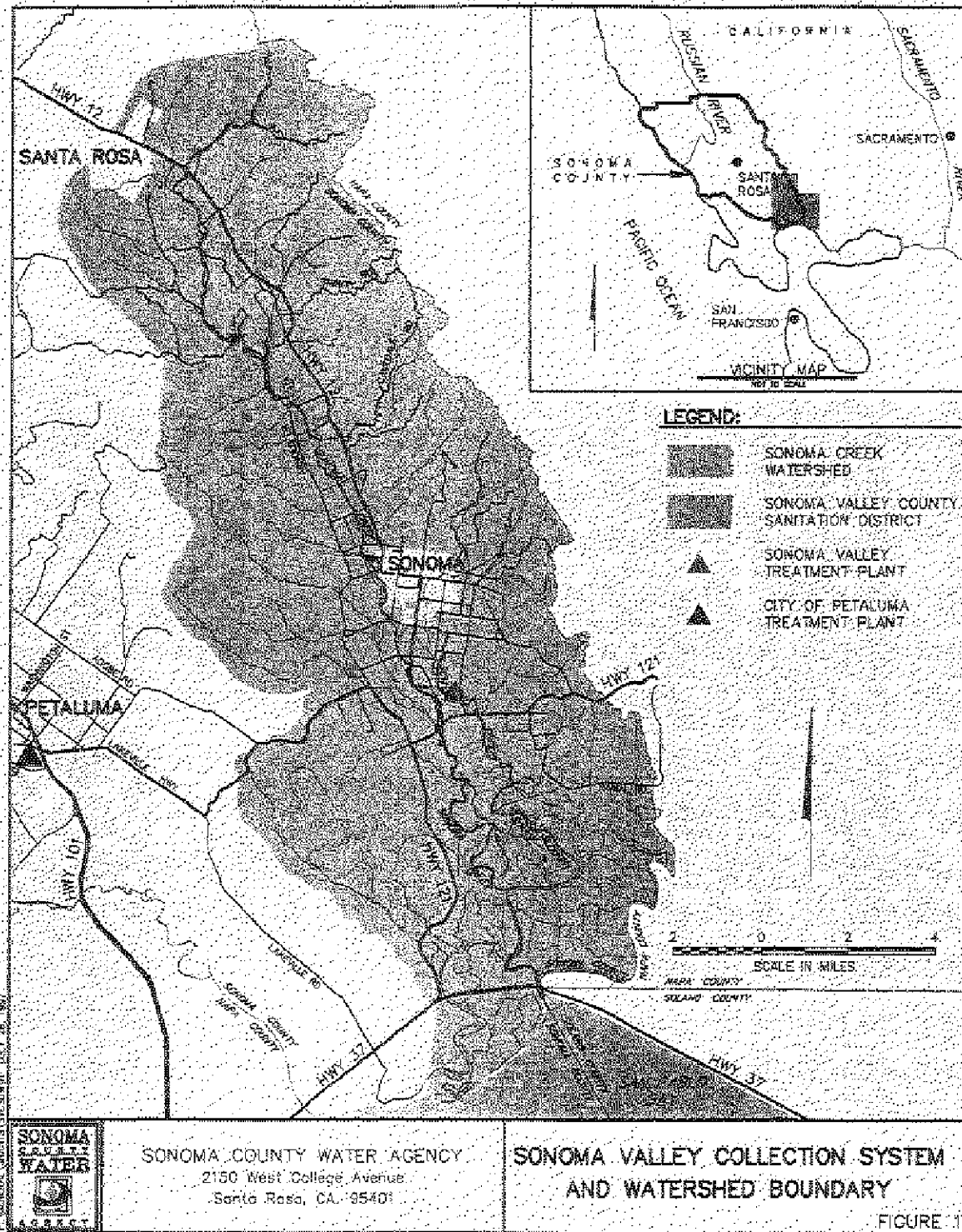
The Sonoma Valley CSD requires significant expenditures for (1) replacement of undersized and deteriorated pipelines in the collection system, (2) replacement of worn out or obsolete equipment at the treatment plant, (3) expansion of the treatment plant to reliably accommodate current and projected inflows, and (4) expansion of the reclamation system, to produce reclaimed water that meets tertiary-treatment standards (Figure 3). It is very unlikely that the annual sewer charge rates could be increased to the levels necessary to fund programs to address all of these issues. Therefore, CALFED funds are requested to address issues relating to upgrading and expanding the treatment plant, because (1) these issues have the greatest affect on the quality of reclaimed water discharged to San Pablo Bay, and (2) an expansion and upgrade project will be relatively easy to implement.

The project would require preparation of a California Environmental Quality Act (CEQA) compliance document, an engineering feasibility report, a financial plan, design of the necessary equipment needed to meet tertiary standards, modifications to the existing treatment plant equipment, and project construction and treatment plant operation specifications. The improvements necessary to complete the project could be constructed within the limits of the existing treatment plant and would therefore would not require the acquisition of additional land or easements.

Because there are less restrictions on the reuse of tertiary-treated reclaimed water, there would be greater demand for this water from agricultural, industrial, and municipal users. Treatment plant upgrades to produce tertiary-treated water would improve water quality in Schell Slough because (1) the reclaimed water would be of higher quality than the current secondary-treated reclaimed water produced by the treatment plant, and (2) discharges to Schell Slough would be decreased as a result of additional reuse of the reclaimed water for direct beneficial uses. This project would cost approximately \$10,000,000 and could be completed within 3 to 5 years. Future operations and maintenance costs for operating the treatment plant would continue to be funded through annual sewer charges to the Sonoma Valley CSD customers.

### **B. Location and/or Geographic Boundaries of Project**

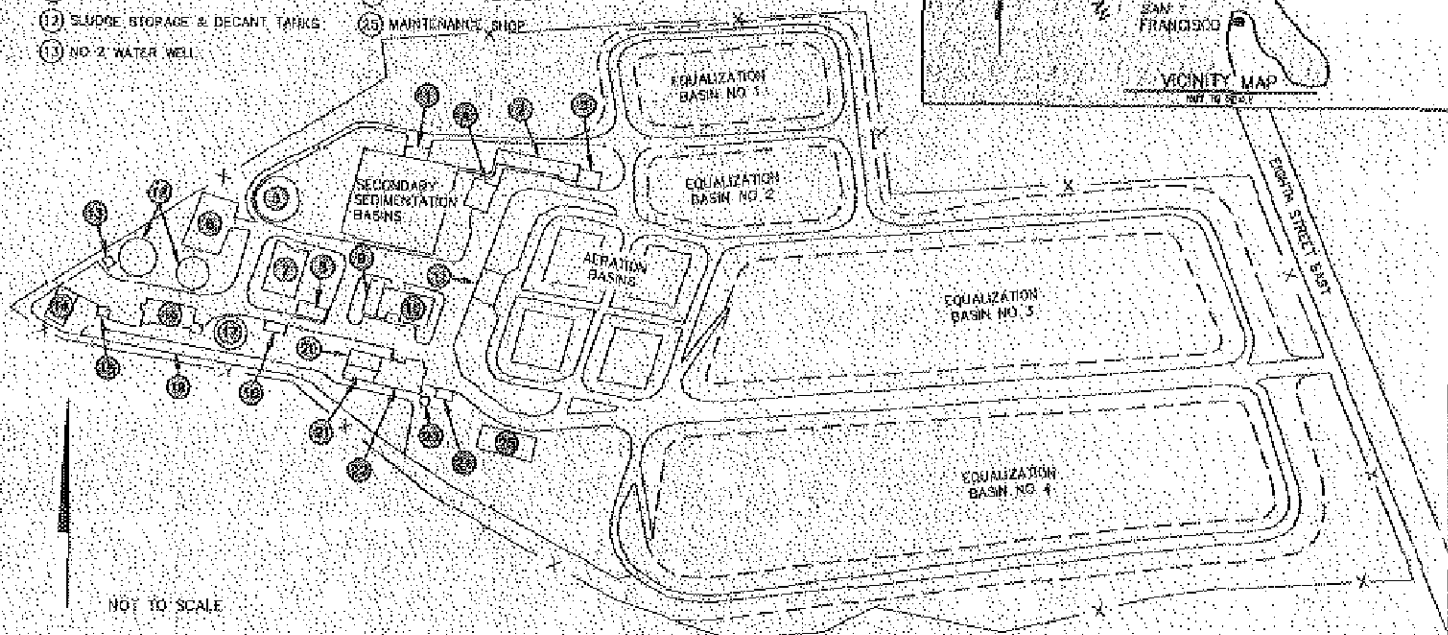
The Sonoma Valley CSD is located in southern Sonoma County in the center of the Sonoma Creek watershed (Figure 1). The Sonoma Creek watershed covers an area of approximately 170 square miles. Sonoma Creek flows in a southerly direction through the Sonoma Valley into central San Pablo Bay. Sonoma Creek has many small tributaries, most of which still support small anadromous fisheries. The lower portion of the creek is joined by a number of tidal sloughs and bordered by tidal marsh. The Sonoma Valley CSD treatment plant discharges into Schell Slough.





# LEGEND

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| ① GAS PUMP STRUCTURE              | ⑭ GARAGE                         |
| ② CHLORINE CONTACT BASIN          | ⑮ SEPTIC TRUCK DISCHARGE BOX     |
| ③ NO. 2 WATER PUMP ROOM           | ⑯ SLUDGE DEWATERING BUILDING     |
| ④ BLOWER BUILDING                 | ⑰ GRAVITY THICKENER              |
| ⑤ ABANDONED PACKING FILTER        | ⑱ STORAGE BUILDING               |
| ⑥ SLUDGE STORAGE PAD              | ⑲ FLOOD CONTROL DITCH            |
| ⑦ ABANDONED PRIMARY CLARIFIER     | ⑳ GENERATOR ROOM                 |
| ⑧ GRIT CHAMBER                    | ㉑ HEADWORKS                      |
| ⑨ CHLORINE STORAGE & CHLORINATION | ㉒ INFLUENT-EFFLUENT PUMP STATION |
| ⑩ ADMINISTRATION BUILDING         | ㉓ SCUM HOLDING TANK              |
| ⑪ FLOW CONTROL STRUCTURE          | ㉔ EFFLUENT METER BOX             |
| ⑫ SLUDGE STORAGE & DECANT TANKS   | ㉕ MAINTENANCE SHOP               |
| ⑬ NO. 2 WATER WELL                |                                  |



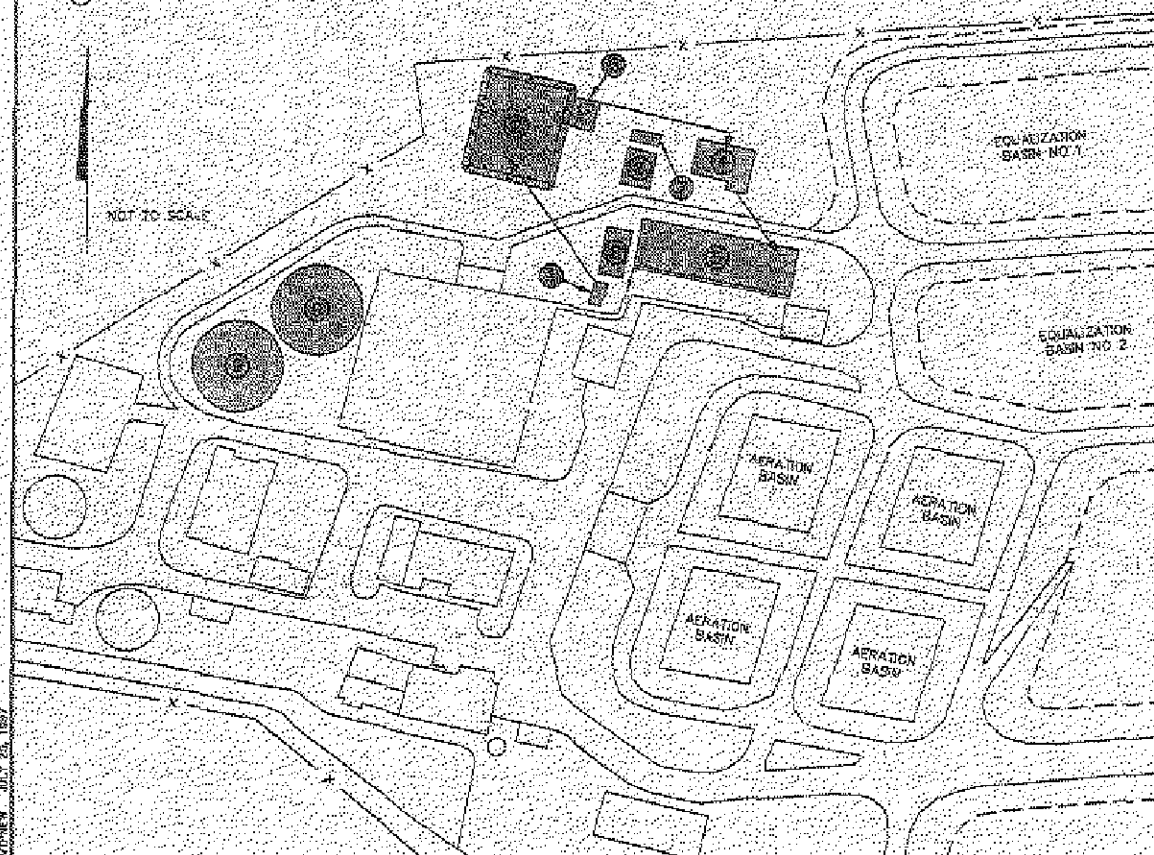
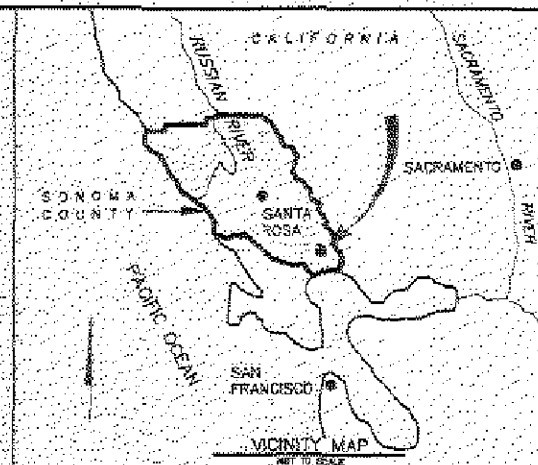
SONOMA COUNTY WATER AGENCY  
2150 West College Avenue  
Santa Rosa, CA 95401

SONOMA VALLEY COUNTY SANITATION DISTRICT  
EXISTING SECONDARY TREATMENT PLANT

FIGURE 2

# **LEGEND**

- ① DIVERSION BOX
- ② FILTER BALLAST POND
- ③ FILTER FEED PUMP STATION
- ④ FILTERS AND FLOCCULATION TANKS
- ⑤ CHLORINATION BASIN
- ⑥ FILTER SUPPORT
- ⑦ CHEMICAL STORAGE
- ⑧ CHLORINE/SULFUR DIOXIDE BUILDING
- ⑨ CLARIFIER



SONOMA COUNTY WATER AGENCY  
2150 West College Avenue  
Santa Rosa, CA. 95401

SONOMA VALLEY COUNTY SANITATION DISTRICT  
PROPOSED TERTIARY TREATMENT PLANT

FIGURE 3

### C. Expected Benefits

The purpose of the proposed project is to improve water quality by (1) reducing reclaimed water discharges into Schell Slough, and (2) improving the quality of water that is discharged. Water Quality is the primary stressor (as defined by the ERPP) addressed by the proposed project. Priority species, habitat and expected benefits are summarized in Table 1. Further details on expected benefits are discussed below.

Table 1. Summary of priority species, habitat usage and expected benefits from implementation of the proposed Sonoma Valley CSD Treatment Plant upgrade project.		
Priority Species	Habitat in Project Vicinity	Expected Benefits
Winter-run and spring-run chinook salmon	Chinook juveniles were found in the North Bay Marshes by CH2M Hill in 1996. Although these specimens were determined to be fall-run progeny, their presence suggests that the North Bay Marshes are suitable rearing habitat for chinook juveniles.	The North Bay Marshes and San Pablo Bay provide habitat for all of the fisheries on the Priority Species list. Implementation of the proposed project will improve water quality in Sonoma Creek, San Pablo Bay, the North Bay Marshes, and their tributaries. Currently, the Sonoma Valley CSD treatment plant discharges secondary-treated reclaimed water into the San Pablo Bay/North Bay Marsh complex between November 1 and April 30. The proposed project will greatly improve the quality of water discharged by the treatment plant. In addition, it is anticipated that there will be a greater demand for direct beneficial use of the tertiary-treated reclaimed water, thereby reducing the need to discharge into surface waters.
Delta smelt	Delta smelt have been documented in the North Bay Marshes by CDFG (1977) and Wetlands Research Associates (1995). Delta smelt do not breed in the North Bay Marshes, but use the area for juvenile rearing and foraging.	
Splittail	Sacramento splittail have been observed in the North Bay Marshes by CDFG (1977) and CH2M Hill (1996). Splittail use the North Bay Marshes during all life history phases, including spawning, juvenile rearing and foraging.	
Steelhead trout	Steelhead are known to inhabit every major tributary to San Pablo Bay and the North Bay Marshes. Steelhead spawn in the tributaries and use the North Bay Marshes during migration and rearing.	
Green sturgeon	Green sturgeon have been collected in San Pablo Bay (Moyle 1976).	
Striped bass	Striped bass are an economically important game species throughout the entire San Pablo Bay region.	Expected benefits to migratory birds are the same as described for fisheries above.
Migratory birds	Hundreds of thousands of migratory waterfowl, shorebirds, and wading birds rely on the San Pablo Bay/North Bay Marsh complex. The marsh is used by migratory birds during all phases of life history, including breeding, foraging, roosting, and overwintering.	

#### Primary Stressors and Benefits

The ERPP identified several water quality stressor subcategories within the North Bay region, such as increased contaminants, that will be minimized by implementation of the proposed project.

*Increased Contaminants:* Currently the Sonoma Valley CSD treatment plant annually discharges 1.8 billion gallons of secondary-treated water into the San Pablo Bay/North Bay Marshes complex. The proposed project will greatly improve the quality of reclaimed water discharged by the treatment plant. Because there are less restrictions on the reuse of tertiary-treated water, there would be greater demand for this water from agricultural, industrial, and

municipal users. Additional reuse of reclaimed water will reduce the volume of reclaimed water discharged to Schell Slough.

#### Potential Benefits to Other Ecosystem Restoration Programs

SCWA has proposed connecting the Sonoma Valley CSD and Petaluma's wastewater treatment plants to provide reclaimed water to the former bittern ponds in the California Department of Fish and Game (CDFG) Napa-Sonoma Marsh Wildlife Area for wetland restoration. These ponds contain large amounts of extremely concentrated seawater constituents that must be diluted to make the ponds suitable for wildlife. Currently, this proposal would use secondary-treated reclaimed water produced by these treatment plants for dilution of bittern pond water. The benefits and viability of the proposed intertie would increase significantly if the reclaimed water discharged to these ponds met tertiary-treatment standards.

#### Potential Benefits to Third Parties

Because there are less restrictions on the reuse of tertiary-treated reclaimed water, there are greater potential direct beneficial uses for such water. This reclaimed water could be used to offset potable water use, thereby reducing demand on freshwater resources. Tertiary-treated reclaimed water also has much wider allowable uses for agriculture, which could result in a reduction in agricultural diversion of freshwater.

### **D. Biological Justification**

Project Need: Currently the Sonoma Valley CSD treatment plant annually discharges 1.8 billion gallons of secondary-treated water into San Pablo Bay. The proposed project would significantly improve the quality of that discharge.

Proposed Approach and Alternatives: The proposed approach is presented in detail in *A. PROJECT DESCRIPTION*. Alternatives to the proposed project include continued discharge of secondary-treated water into San Pablo Bay, or developing increased demand for reuse of secondary-treated water.

Basis for Expected Benefits: All of the priority species listed in *C. EXPECTED BENEFITS* are known to exist in the vicinity of the proposed project. The proposed project will improve water quality in a major tributary to the largest tidal marsh in California.

Durability of Expected Benefits: The expected benefits associated with the proposed infrastructure are anticipated to continue as long as the proposed facilities remain operable.

Project Status: Preliminary designs for the treatment plant upgrades were prepared in 1993 (filters) and in 1997 (clarifiers). See *A. PROJECT DESCRIPTION* and *G. IMPLEMENTABILITY* for further detail.

### **E. Proposed Scope of Work**

Completion of the proposed project will require the preparation of a CEQA compliance document, an engineering feasibility study, and a financial plan. Additionally, the proposed project will include the

*PROJECT DESCRIPTION 3*

design of treatment plant improvements, project construction, and treatment plant operation and maintenance. Descriptions of these tasks are presented below.

**Task 1 - CEQA Compliance Document:** An evaluation of potential environmental impacts associated with expansion and upgrades to the Sonoma Valley CSD treatment plant to meet tertiary-treatment standards will need to be prepared. It is anticipated that this CEQA compliance process will be completed within 12 to 18 months of receiving authorization to proceed.

**Task 2 - Engineering Feasibility Study:** As part of the CEQA process, an engineering feasibility study would be performed to evaluate alternatives for the treatment plant upgrade project. An engineering feasibility study report would be prepared concurrent with preparation of the CEQA compliance document and would be completed within 12 to 18 months of receiving authorization to proceed.

**Task 3 - Financial Plan:** As part of the CEQA process, a financial plan would be prepared that evaluates financing options for the proposed project. A financial plan would be prepared concurrent with preparation of the CEQA compliance document and would be completed within 12 to 18 months of receiving authorization to proceed.

**Task 4 - Project Design:** Following certification of the EIR, necessary improvements to the Sonoma Valley CSD treatment plant will be designed. Design plans and specifications for construction of the project would be prepared as part of this task. Draft construction plans would be prepared at the 30%, 60%, and 90% stages of design. These plans and specifications will be prepared within 12 to 18 months after the CEQA compliance process has been completed.

**Task 5 - Project Construction:** Project construction activities will include solicitation of bids for project construction based on design plans and specifications, selection of a construction contractor, construction of improvements, project management, and construction inspection. The deliverable product resulting from these activities will be a tertiary treatment plant. This task will be completed within 12 to 24 months after preparation of design plans and specifications.

**Task 6 - Treatment Plant Operation and Maintenance:** Following completion of the proposed project, the treatment plant will require ongoing operations and maintenance to ensure continued compliance with the applicable discharge permits. Monitoring reports that are associated with the operation of the treatment plant will be used to document these operations.

## **F. Monitoring and Data Evaluation**

To analyze the effectiveness of this program in improving the water quality of Schell Slough, Sonoma Creek and San Pablo Bay, a monitoring program would be implemented. Water quality monitoring would be conducted near former discharge points into Schell Slough. Baseline sampling would be conducted in these areas to determine water quality prior to eliminating wastewater discharge and to provide data for future analytical comparison. Monitoring would incorporate all elements typically tested in wastewater prior to discharge, including biological oxygen demand (BOD), total suspended solids, pH, chlorine residuals, copper, zinc, and others.

In addition, monitoring would be conducted on drainages present in areas where reclaimed water is or will be used for irrigation and other purposes. Monitoring would involve analyzing water quality and

*PROJECT DESCRIPTION 4*

quantity (flow volume) during late spring, summer, and fall months to assess improvements in water quality and flow due to a reduction in agricultural use of creeks and streams. Where possible, baseline sampling would be conducted in these creeks and drainages to determine water quality and quantity prior to project implementation and to provide data for future analytical comparison.

#### **G. Implementability**

Upgrades and expansion of the Sonoma Valley CSD treatment plant can be performed using conventional wastewater treatment equipment. This treatment plant has been operating since 1977 and is funded through annual service charges. Costs associated with operation and maintenance of the project would be funded by the Sonoma Valley CSD.

As indicated previously, all of the improvements necessary to complete the proposed project would be performed on property owned by the Sonoma Valley CSD, and, therefore, no additional easements or land would need to be obtained. The treatment plant currently operates in accordance with a National Pollutant Discharge Elimination System (NPDES) permit issued to the Sonoma Valley CSD by the Regional Water Quality Control Board, San Francisco Bay Region. This permit, which is currently in the process of being renewed for another 5 years, allows for secondary-treated reclaimed water to be discharged to Schell Slough between November 1 and April 30. Treatment plant upgrades that result in the production of tertiary-treatment standards would further ensure compliance with the less-stringent secondary treatment requirements specified in the NPDES permit.

The Sonoma Valley CSD currently provides reclaimed water to several agricultural users in the southern Sonoma Valley for irrigating vineyards, hayfields, and pastures. Since July 1996, the SCWA has worked with local agricultural representatives to evaluate the potential for increasing use of reclaimed water for irrigation. Preliminary calculations indicate that the demand for tertiary-treated reclaimed water exceeds the aggregated production capacity of all wastewater treatment plants in Sonoma County. SCWA representatives have held numerous meetings with the Sonoma Valley Chamber of Commerce, City of Sonoma staff and elected officials, and Sonoma Valley agricultural leaders. Based on these efforts, there appears to be wide-ranging support for upgrading the Sonoma Valley CSD treatment plant to tertiary standards and for providing reclaimed water to agricultural, municipal, and industrial users. Many potential users of reclaimed water could be serviced through the Sonoma Valley CSD's existing reclamation system.

## COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

### A. Budget Costs

As indicated in A. *PROJECT DESCRIPTION AND APPROACH*, the Sonoma Valley CSD requires significant expenditures for the (1) replacement of undersized and deteriorated pipelines in the collection system, (2) replacement of worn out or obsolete equipment at the treatment plant, (3) expansion of the treatment plant to reliably accommodate current and projected inflows, and (4) expansion of the reclamation system. It is very unlikely that the annual sewer charge rates could be increased to the levels necessary to fund programs to address all of these issues. Therefore, CALFED funds are requested to address issues relating to upgrading and expanding the treatment plant. These issues have the greatest affect on the quality of reclaimed water discharged to San Pablo Bay, and projects addressing these issues will be relatively easy to implement.

The total estimated cost for the proposed project is \$10,000,000. A breakdown of the budgeted costs and funding source for each task is presented below.

SONOMA VALLEY CSD				
Task Description	Direct Salary and Benefits	Service Contracts	Construction Contracts	Total Cost
CEQA Compliance Document	\$30,000	\$0	\$0	\$30,000
Engineering Feasibility Study	\$20,000	\$0	\$0	\$20,000
Financial Plan	\$50,000	\$0	\$0	\$50,000
Project Design	\$50,000	\$0	\$0	\$50,000
Project Construction	\$550,000	\$0	\$4,300,000	\$4,850,000
<b>Total - Sonoma Valley CSD Funding</b>	<b>\$700,000</b>	<b>\$0</b>	<b>\$4,300,000</b>	<b>\$5,000,000</b>

CALFED GRANT				
Task Description	Direct Salary and Benefits	Service Contracts	Construction Contracts	Total Cost
CEQA Compliance Document	\$0	\$200,000	\$0	\$200,000
Engineering Feasibility Study	\$0	\$100,000	\$0	\$100,000
Financial Plan	\$0	\$0	\$0	\$0
Project Design	\$0	\$600,000	\$0	\$600,000
Project Construction	\$0	\$0	\$4,100,000	\$4,100,000
<b>Total - CALFED Grant Funding</b>	<b>\$0</b>	<b>\$900,000</b>	<b>\$4,100,000</b>	<b>\$5,000,000</b>

PROJECT TOTALS				
Task Description	Direct Salary and Benefits	Service Contracts	Construction Contracts	Total Cost
CEQA Compliance Document	\$30,000	\$200,000	\$0	\$230,000
Engineering Feasibility Study	\$20,000	\$100,000	\$0	\$120,000
Financial Plan	\$50,000	\$0	\$0	\$50,000
Project Design	\$50,000	\$600,000	\$0	\$650,000
Project Construction	\$550,000	\$0	\$8,400,000	\$8,950,000
<b>Total - Project</b>	<b>\$700,000</b>	<b>\$900,000</b>	<b>\$8,400,000</b>	<b>\$10,000,000</b>

**B. Schedule Milestones**

It is anticipated that this project could be completed within 5 years of receiving the necessary funding. Schedule milestones for each task are presented below.

<u>Task</u>	<u>Estimated Completion (from start of project)</u>
CEQA Compliance Document	18 months
Engineering Feasibility Study	18 months
Financial Plan	18 months
Project Design	36 months
Project Construction	60 months

**C. Third Party Impacts**

There are no apparent third party impacts associated with the proposed project.



## **APPLICANT QUALIFICATIONS**

### **Organization of Staff and Other Resources:**

The Sonoma County Water Agency (SCWA) is a special District created by the California State Legislature (Statutes of 1949, Chapter 994 as amended). SCWA is empowered to produce and furnish surface and groundwater for beneficial uses; to control and dispose of flood, storm, and other waters; to generate electrical energy; to provide sanitary sewerage services; and to provide recreational services in connection with flood control and water conservation works. SCWA exercises all of these powers.

New legislation was enacted in 1994, to add wastewater disposal to SCWA's responsibilities. SCWA assumed management responsibilities for County sanitation districts and zones on January 1, 1995, from the former Sonoma County Department of Public Works. Included in the Sonoma County sanitation districts and zones are the Sonoma Valley CSD, Forestville County Sanitation District, Graton Sanitation Zone, Sonoma County Airport Sanitation Zone, Geyserville Sanitation Zone, South Park County Sanitation District, and Occidental County Sanitation District. SCWA's principal sanitation functions are to oversee, operate, and maintain the sanitation zones as determined by the various terms required by the National Pollution Discharge Elimination System (NPDES) permits issued by the North Coast and/or San Francisco Bay Regional Water Quality Control Boards.

SCWA has two principal water supply functions. SCWA owns and operates a water transmission system which delivers water to a number of public and investor-owned water distribution systems in Sonoma and Marin Counties. This transmission system is financed, constructed, and maintained pursuant to an Agreement for Water Supply and Construction of the Russian River-Cotati Intertie Project, dated October 25, 1974, and last amended June 28, 1995. SCWA also regulates the flow of the Russian River for the benefit of agricultural, municipal and instream beneficial uses within Mendocino and Sonoma Counties and municipal uses in Marin County. This function is carried out pursuant to Decision 1610 of the California Water Resources Control Board dated April 17, 1986. This Decision amended the several appropriate water rights permits held by SCWA and established the criteria for the coordinated operation of two federal projects, the Coyote Valley Dam Project on the East Fork Russian River and the Warm Springs Dam Project on Dry Creek. SCWA controls the water supply storage space of the U. S. Army Corps of Engineers Projects under contracts with the United States Government. The water transmission system is operated as an enterprise with revenues derived from water and power sales. The regulation of the Russian River is a governmental function and all costs associated with the USACE projects are paid with the proceeds of countywide levied property taxes, except in the case of Marin and Mendocino County beneficiaries which pay a water charge in lieu of the Sonoma County property tax.

Pursuant to a license from the Federal Energy Regulatory Commission, SCWA constructed and operates a 2.6 megawatt hydroelectric project at Warm Springs Dam. The power is sold to Pacific Gas and Electric Company pursuant to an "as delivered" Public Utilities Commission approved Interim Standard Offer No. 4 power purchase contract. The project was financed by the water transmission system enterprise fund and power sales revenues are pledged to that fund.

SCWA maintains recreational areas at a number of its facilities. The most important of these is Spring Lake Park which was constructed by SCWA and is operated by the County of Sonoma Regional Parks Department under a service contract with SCWA.

The County of Sonoma Board of Supervisors is, ex officio, the Board of Directors of SCWA. The County Administrator, County Clerk, County Assessor, County Tax Collector, County Auditor, County Treasurer, County Counsel, County Purchasing Agency and District Attorney are, unless otherwise provided by the Board of Directors, also ex officio officers of SCWA. SCWA is administered by the General Manager/Chief Engineer, Randy D. Poole, who serves at the pleasure of the Board of Directors.

### **Collaborating Participants**

SCWA is seeking statements of support for this project application from various agencies and organizations with shared environmental interests and concerns. SCWA's solicitation of support letters is taking place concurrently with the preparation of this application. A complete list of the 35 agencies and organizations contacted is provided in Appendix I. Letters received prior to the application deadline will be attached for your review. Additional letters will be forwarded to CALFED as they are received.

### **Technical, Administrative and Project Management Roles**

Randy D. Poole, General Manager/Chief Engineer of the Sonoma County Water Agency (SCWA) will serve as the Principal Administrator for the project, providing direction and assigning project management and technical functions to SCWA staff. Fiscal review will be supervised by the Administrative Services Officer for SCWA. Grant reporting requirements will be monitored and coordinated by the Grants Procurement Manager.

### **Biosketches**

#### **Randy D. Poole, General Manager/Chief Engineer, Sonoma County Water Agency**

Randy D. Poole holds a Bachelor of Science degree in Agricultural Engineering from Oregon State University (1976) and is a registered Professional Civil Engineer in the States of California and Oregon. He is currently the General Manager/Chief Engineer for the Sonoma County Water Agency. Prior to that, his professional career includes service as Chief Engineer for the Sonoma County Water Agency (1991-94), Chief Engineer/Assistant General Manager for the Marin Municipal Water District (1989-91), and Senior Engineer for the City of Portland, Bureau of Water Works, in Portland, Oregon (1986-89).

Mr. Poole is experienced in CEQA and environmental issues, all levels of management for the design, construction, operation, and maintenance of major water, wastewater, and recreational water facilities, including dams, treatment plants, reservoirs, pump stations, storage tanks, groundwater well field systems, larger-diameter pipelines, and other appurtenant facilities. He is also experienced in all phases of water and wastewater supply transmission, storage, pumping, distribution, water rights issues, and groundwater recharge-extraction programs. His professional memberships include the American Water Resources Association, American Water Works Association, and the American Society of Civil Engineers.

Renee T. Webber, Supervising Environmental Specialist, Sonoma County Water Agency

Renee T. Webber holds a Bachelor of Arts degree in Environmental Studies, with a minor in Water Resources, from California State University, Sacramento (1984). She is currently the Supervising Environmental Specialist (Environmental Impact Studies and Reports) for the Sonoma County Water Agency, where she supervises and coordinates the environmental review of public and private construction and development projects, is responsible for the preparation of appropriate environmental reports for such projects, and performs related duties as required.

Ms. Webber has a thorough knowledge of Federal, State, and local laws, regulations, current programs and court decisions pertaining to environmental protection. She is well informed about environmental considerations in the design, location, and construction of public (flood control, highway, water supply, sanitation) and private (residential, commercial, industrial) projects as well as citizen and public interest groups dealing with environmental matters.

Sean K. White, Supervising Environmental Specialist, Sonoma County Water Agency

Sean K. White holds a Bachelor of Science degree in Fisheries Biology from Humboldt State University (1991). He is currently the Supervising Environmental Specialist (Fisheries) for the Sonoma County Water Agency, where he manages the Fisheries Enhancement Program. Prior to that, his professional career includes service as the resident Fisheries Biologist and Wildlife Ecologist for Wetlands Research Associates, Inc., in San Rafael, California, and also a Director on the Marin Municipal Water District Board of Directors.

Mr. White has authored the fisheries component for numerous environmental documents, including *Biological Assessment, Route 37 Improvements White Slough Specific Area Plan Environmental Studies (1995)*, *Cargill Salt Environmental Assessment (1994)*, and *Redwood High School Marsh Enhancement Monitoring (1993)*. In addition, he has engaged in a wide variety of fishery resource surveys and has utilized numerous restoration techniques.

Michael D. Thompson, Civil Engineer, Sonoma County Water Agency

Michael D. Thompson holds a Bachelor of Science degree in Civil Engineering from California Polytechnic State University, San Luis Obispo (1982). In addition, he holds a Master of Science degree in Civil Engineering and a Master of Business Administration degree, both from the University of California, Davis (1987). He is a registered Professional Civil Engineer as well as a Registered Environmental Assessor in the State of California. He is currently a Civil Engineer for the Sonoma County Water Agency. Prior to that, his professional career includes service at two Novato, California, firms -- as Senior and Associate Engineer for PES Environmental, Inc. (1989-96), Project Engineer for Harding Lawson Associates (1987-89) and as Staff Engineer for S. S. Papadopoulos, Davis, California.

Mr. Thompson has provided environmental engineering services to both private and public sector clients. He is familiar with a wide variety of civil and environmental engineering projects. He has prepared structural designs using steel, concrete, and earth building materials, performed groundwater modeling, become familiar with regulations associated with drinking water quality and wastewater discharge, directed earthwork grading projects, supervised and trained technical staff, and managed complex environmental investigation and remediation projects.

## ***COMPLIANCE WITH STANDARD TERMS AND CONDITIONS***

### **Conflicts of Interest**

The Sonoma County Water Agency, as Applicant, will comply with all State and Federal conflict of interest laws, including but not limited to, Government Code Section 1090, and Public Contract Code 10410 and 10411 for State conflict of interest requirements.

### **References for Similar Projects**

Similar projects in which the Sonoma County Water Agency has served as a partner, participant, or lead agency are described in the following project reports:

1. Sonoma Valley County Sanitation Districts Hudeman Slough Discharge Management Plan, 1994
2. Hudeman Slough Mitigation and Enhancement Wetlands, 1996
3. Sonoma County Water Agency Fisheries Enhancement Program
4. Adobe Creek Fishway Construction and Habitat Restoration
5. Russian River Action Plan

***APPENDICES***

***LETTERS OF SUPPORT***

**Richard Charter**

6947 Cliff Avenue, Bodega Bay, CA 94923  
(707)875-3482 (707)875-2345 fax (707)875-2947

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July 22, 1997

CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

To Whom It May Concern:

I am writing in support of a grant proposal by the Sonoma County Water Agency for a recycled water distribution pipeline connecting the City of Petaluma and the City of Santa Rosa Subregional Treatment Plants. It is clear that this project could facilitate the restoration of degraded bayfront wetland habitat at the Cargill site and would also provide a very significant contribution to the utilization of treated wastewater for agricultural irrigation and for other constructive purposes.

I have been a direct participant in the restoration of tidal wetlands at the Sonoma Baylands Project and the Petaluma River Tidal Marsh Restoration Project during my former tenure as Executive Director of the Sonoma Land Trust. I appreciate the complexity of habitat restoration projects and the challenges faced by agencies seeking to carry out such projects, particularly when it comes to securing an allocation of fresh water in a water-scarce region.

My support is contingent upon thorough environmental review of the proposed project and the concurrence of all relevant regulatory agencies that the project would enhance the health of San Francisco Bay.

Sincerely,

*Richard Charter*

Richard Charter

# SONOMA COUNTY CONSERVATION ACTION

540 Pacific Avenue, Santa Rosa, CA 95404

Phone: (707) 571-8566 • FAX: (707) 575-8903

Tuesday, July 22, 1997

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Una Glass  
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Rick Theis

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Mark Green

## Program Director

Joelle Goncalves

FPPC ID #911196

Randy Poole  
General Manager  
Sonoma County Water Agency  
2150 West College Ave.  
Santa Rosa, CA 95401

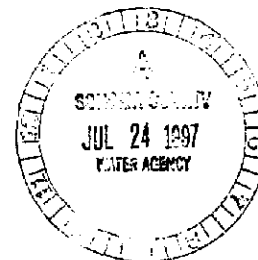
Dear Randy:

I am writing on behalf of Sonoma County Conservation Action, the county's largest conservation organization with more than 7,500 member households in Sonoma County. Conservation Action organizers personally contact 50,000 households per year, which provides us with a clear sense of the local political pulse.

We are writing in reference to the application for Cal/Fed grant funding by the Sonoma County Water Agency for proposed wastewater pipeline projects which would serve to provide irrigation with tertiary-treated wastewater to agriculture in southern Sonoma County and to flush the Cargill salt pond site in southern Napa County with overflow wastewater for purposes of restoring the Cargill site as a functioning bay wetland.

Conservation Action supports the Agency's application for Cal/Fed funding for the southern Sonoma County project, for the following reasons and subject to the caveats listed on the following page:

- Tertiary treated wastewater is a high-quality resource developed at great cost by the communities of our county.
- Local agriculture should benefit from the use of this water rather than demanding more withdrawal of fresh water from the Russian River.
- A vital agricultural economy is the best defense against urban encroachment into the world-class agricultural lands of Sonoma County.
- In light of the historical eradication of 90% of San Francisco Bay's wetlands, the restoration of 10,000 acres of bay wetlands at the Cargill site would constitute a major step forward in enhancing the biological health of the Bay.





Conservation Action's tentative endorsement of this project is subject to the following conditions:

- That the net environmental impacts of the proposed projects be thoroughly studied and that all appropriate regulatory agencies agree that the project would enhance the health of land and waterways in Sonoma County and of San Francisco Bay ecosystems.
- That the Sonoma County Water Agency adopts policies which commit the Agency to principles of stewardship and environmental responsibility in managing its reclaimed water collection and distribution systems.
- That the Agency commit to creating permanent mechanisms, such as advisory committees, through which the local environmental community will have greater access to information about the activities of the Agency and greater input into the decision-making of the Agency.

If these criteria are agreed to by the Sonoma County Water Agency, Sonoma County Conservation Action supports SCWA's application for Cal/ Fed grant funding for the Cargill project.

Please contact my office if there are questions.

Sincerely,



Mark Green  
Executive Director

July 22, 1997

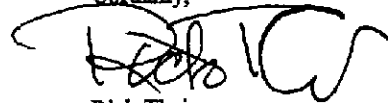
CALFED Bay Delta Program  
1416 Ninth St., Suite 1155  
Sacramento, CA 95814

RE: Sonoma County Water Agency Fund Requests

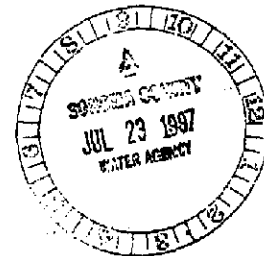
The Sonoma County Grape Growers Association urges you to support the five major restoration planning efforts by the Sonoma County Water Agency. All projects will have a beneficial effect on the Sonoma County environment. These projects will significantly improve habitat for fisheries, migratory waterfowl, shorebirds and wading birds in the Bay Area. A healthy wildlife habitat is important to achieve a sustainable Bay Area where agriculture can thrive. Also, one of the projects may potentially benefit agriculture in the Lakeville area, which we strongly support.

Thank you for your consideration.

Cordially,



Rick Theis  
Executive Director



850 Second Street, Suite C • Santa Rosa, California 95404 • (707) 576-3110

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I-003658



North Bay Chapter, 632 Fifth Street, Santa Rosa, CA 95402

July 22, 1997

CALFED Bay-Delta Program  
1416 Ninth Street Suite 1155  
Sacramento, CA 95814

Dear CAL-FED Bay-Delta Program:

This letter is to confirm Trout Unlimited's support for the Sonoma County Water Agency proposal to reuse reclaimed water from the Santa Rosa Subregional Treatment plant for restoration of Bay Wetlands at the Cargill Salt Ponds.

Trout Unlimited is a cold water fishery conservation organization with 95,000 members internationally and 1,100 members in the North Bay Chapter. Our membership is particularly concerned about the Coho Salmon and Rainbow Steelhead Trout fisheries of the Russian River and opposes any further degradation of the Laguna de Santa Rosa (an Impaired Waterway), Mark West Creek, and the Russian River by resource wasteful waste water discharges to threatened and endangered salmonid habitat.

A program to reuse the Subregional plant's reclaimed water for restoration of Bay Wetlands is the type of proposal we can support that will actually use this valuable water resource for environmental enhancement rather than waste over 8 billion gallons of water annually discharging it to the once thriving salmonid habitat of the Russian River.

We urge CALFED to approve funding for the upgrading of the Sonoma Valley and Petaluma treatment plants to tertiary treatment and restoring 8,000 acres of Cargill salt pond to important wetland and fishery nursery habitat by providing a pipeline from Santa Rosa's Subregional treatment plant to the Petaluma Plant and the Sonoma Valley plant to the Cargill salt ponds. This pipeline will also allow for North Bay agricultural economic development by reuse of the nutrient-rich water along the pipeline's route.

Trout Unlimited would be pleased to be represented on a citizen advisory committee to the Sonoma County Water Agency to help in the implementation of this project and restoration work planned in the North Bay and Russian River watersheds.

Sincerely,  
TROUT UNLIMITED

R. Brian Hines  
Board of Directors  
North Bay Chapter

Sincerely,  
TROUT UNLIMITED

Mike Swaney  
Conservation Chairman  
California State Council

cc: Stan Griffin, Regional VP

### **LITERATURE CITED**

California Department of Fish and Game. 1977. The Natural Resources of the Napa Marsh. Coastal Wetlands Series #19.

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Moyle, P.B. 1976. Inland Fishes of California. University of California Press, Berkeley.

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